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ABSTRACT

Previous research on the concept of perceived control has assumed that beliefs about control reflect a generalized personality trait and that people desire as much personal control as possible. To investigate whether perceptions of and needs for control vary across different life domains, and whether the discrepancy between perceived and desired control would have independent effects on well-being, 340 adult (61% female) health clinic out-patients in Detroit were surveyed. Study participants completed a questionnaire measuring control (internal, control by others, and chance control), and perceptions and needs across six life domains (work life, health, personal life, emotions, actions and behavior, and life as a whole). Indicators of well being (anxiety, depression, and life quality) were also measured. An analysis of the results showed that individuals perceived and desired different amounts of control across domains. Both perceived and desired internal control was highest in the self-oriented domain of actions and behavior, and lowest in the health domain and the other-oriented domain of work life. Desired control by others was higher in the health domain than in all other domains. Well-being was most related to perceived control in the domains of actions and behavior and emotions. Well-being was most related to control needs and "misfit" in the domains of actions and behavior and work life. On the whole, control in the self-oriented domains of actions and behavior and emotions appeared to be most important among the domains for predicting well-being. (Author/BL).

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Beliefs about Control in Different Life Domains^{1,2}

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Abstract

The two major issues addressed in this paper concerned whether perceptions and needs for control varied across life domains, and whether control in different domains had a similar impact on psychological well-being. A related issue was whether the amount of perceived control one had was of primary importance for predicting well-being, or whether one's needs or desire for control and the discrepancy (i.e., "misfit") between perceived and desired control had independent effects on well-being. Questionnaires were completed by 340 health clinic out-patients. Respondents answered questions about the amount of internal control, control by others, and chance control they perceived they had as well as how much they desired to have in one of six life domains: Work Life, Health, Personal Life, Emotions, Actions & Behavior, and Life as a Whole. Three indicators of well-being were also measured: anxiety, depression, and life quality. Findings indicated that individuals perceived and desired different amounts of control across domains. Both perceived and desired internal control was highest in the self-oriented domain of Actions & Behavior, and lowest in the Health domain and the other-oriented domain of Work Life. Desired control by others was higher in the Health domain than in all other domains. Findings also indicated that control perceptions, needs, and "misfit" had independent effects on well-being. Well-being was most related to perceived control in the domains of Actions & Behavior and Emotions. Well-being was most related to control needs and "misfit" in the domains of Actions & Behavior and Work Life. On the whole, control in the self-oriented domains of Actions & Behavior and Emotions appeared to be most important among the domains for predicting well-being. These

results indicated that not only perceived control, but also desired control and misfit between perceived and desired control, should be considered when examining the impact of control on well-being.

The concept of perceived control has been a central issue in a substantial body of psychological research which has developed over the last several decades. Numerous theories and models have proposed that perceived control is an important factor affecting a variety of behavioral, cognitive, affective, and physical outcomes, such as motivation, learning, depression, and health (Abramson, Seligman, & Teasdale, 1978; Coates & Wortman, 1980; Krantz & Schulz, 1980; Lefcourt, 1982; Rotter, 1966; Seligman, 1975; Wortman, 1976).

Much of the prior research on control has made two assumptions. First, it has frequently been assumed that beliefs about control reflect a generalized personality trait which colors perceptions across a variety of life situations. The second common assumption has been that the more personal control people perceive themselves as having, the better off they will be. The corollary to this assumption is that people want as much personal control as they can get. Yet, various theoretical considerations and some recent empirical literature suggest that these assumptions might not always be appropriate. The specific issues addressed here can be formulated in terms of two primary research questions: (a) Do perceptions of and needs for control vary across different life domains? and (b) Is higher perceived personal control always associated with greater well-being? This paper examines these assumptions and presents findings which are relevant to them.

Generalizability of Control Across Domains

Rotter's (1966) early work on "generalized expectancies" for control over reinforcements has greatly influenced much of the subsequent research on control. One aspect of this theoretical approach, which stems from social learning theory, suggests that people generalize their

perceptions of control over rewards in one situation to other similar situations. Such generalization leads to development of a general attitude or belief about the causal relationship between one's behavior and its consequences. The resulting generalized "locus" of perceived control produces characteristic differences across individuals which can influence behavior in a broad range of life situations. In this conceptualization, individuals are normally distributed along an internal-external continuum according to their generalized expectancies for control. "Internals" at one end of the continuum believe that they can exert personal behavioral control over rewards, whereas "externals" at the other end believe reinforcements are controlled by factors outside of their personal behavior (e.g., control rests with fate or powerful others in the environment). However, subsequent research has suggested that control expectations might be more appropriately conceptualized using a multidimensional framework rather than a single continuum (Collins, 1974; Gurin, Gurin, Lao, & Beattie, 1969; Gurin, Gurin, & Morrison, 1978; Lao, 1970; Levenson, 1973a,b,c, 1974; Mirels, 1970; Parsons & Schneider, 1974; Reid & Ware, 1974).

Levenson and others (cf., 1974, Levenson & Miller, 1976) have suggested that separating external control into at least two dimensions, control by others and control by chance factors, has important theoretical significance. For example, control by trusted others may be predictable and even desirable. On the other hand, control by chance factors often implies unpredictability and randomness; hence it may be perceived as more threatening and stressful. Beliefs on these two

external dimensions may, therefore, have a differential impact on behavior and other outcomes [see also Rotter's (1975) discussion of "defensive" and "passive" externals].

Regardless of whether control expectancies are conceptualized as single or multidimensional, social learning theory would predict that control expectancies can influence behavior in a given situation in two different ways: (a) generalized expectancies for control influence behavior when a situation is novel or ambiguous, and when objective sources of control have not been clearly perceived; and (b) specific expectancies for control will have an impact when it has been clearly defined whether or not a person has control in a situation--that is, whether reward is contingent on behavior (cf., Rotter, 1966; 1975). Thus, it might be predicted that generalized expectancies for control, as reflected in general locus of control measures, might be superseded by expectancies in specific types of situations in which differences in objective control are more readily perceived. For example, expectancies for control might be quite different when one considers various subsets of life situations (e.g., work life vs. home life vs. emotional life). Assuming that the one's objective ability to control reinforcements through behavior varies across situations and that people do not necessarily over-generalize from one domain to the next, global assessments of "internal" versus "external" locus of control might sometimes be less appropriate than more specific ones which reflect a particular life domain.

Control perceptions may have a differential impact on outcomes depending on the domain in which they are perceived. Only a few studies have used domain-specific measures of control or addressed the issue of

general versus domain-specific expectancies. One example is the development of the Health Locus of Control Scale by Wallston and colleagues (Wallston, Wallston, Kaplan & Maides, 1976). Another example is the literature on "participation" in the work domain (cf., French & Caplan, 1973).¹ The term "domain" is used in this paper similarly to the way others have used the term (Andrews, 1981; Pervin, 1977). A life domain refers to a situational context which is more specific than a global "life-as-a-whole" context but which generalizes across an array of very specific situations all dealing with a similar context (e.g., home/family, life, work, school, self, health, etc.). Previous research has indicated that relatively few domains can characterize a wide variety of life situations (cf., Pervin, 1977), and that evaluations of relatively few life domains seem to "add up" to more global life evaluations (Andrews, 1981). Thus, in the current study, a few specific life domains were examined as well as a more global life-as-a-whole "domain" (the latter was intended to reflect some generalization across more specific life domains).

Differentiating domain-specific expectations would seem important for better understanding the construct of control and the mechanisms by which beliefs about control impact on adaptive functioning. For example, it seems likely that people might accurately perceive and

¹ The concept of participation overlaps with the general concept of control in that the term has been used to refer to the "process in which two or more parties influence each other in making certain plans, policies, and decisions" (French, Israel, & As, 1960). Several studies have shown that participation in organizational decision processes leads to higher productivity, increased job satisfaction, and improved interpersonal relations (cf., French, Kay, & Meyer, 1966; Coch & French, 1948). Thus, the generally positive impact of participation in the work domain is consistent with the findings of positive outcomes frequently associated with personal control but extends these findings into the particular domain of work.

willingly accept that they have differing amounts of objective control in different types of circumstances. A person with a health problem might gladly accept external control by an "expert" (e.g., a doctor) and even prefer not to have personal control when his or her health is threatened. Yet this same person might concurrently feel a high degree of personal control² in another domain such as at work. Similarly, it is conceivable that some people who maintain high control over their personal lives might be quite happy to relinquish responsibilities on the job and readily accept the "legitimate" external control of a boss.

Desire for Control

As noted earlier, a second common assumption made in control research is that people always want as much personal control as they can get--and the more they have the better. However, some recent literature has questioned whether perceptions and/or desires for high levels of personal control are necessarily more adaptive or beneficial (cf., Abbey, 1982; Janoff-Bulman & Brickman, 1980; Rodin, Rennert & Solomon, 1980; Rothbaum, 1982; Karabenick & Srull, 1978; Pittman & Pittman, 1979). For example, Janoff-Bulman and Brickman (1980) argued that it is not necessarily adaptive for individuals to have extremely high expectations for control when those expectations lead them to persist in a task after repeated failures. These authors suggested that a crucial factor in adaptive functioning is being able to discriminate situations for which persistent attempts at control will pay off from ones which will not yield to a person's attempts at control. Thus, having

² The terms internal control and personal control are used interchangeably in this paper.

different perceptions of control across situations in which objective control does indeed vary would seem to be more adaptive than over-generalizing subjective control from one situation to the next.

This argument is relevant to research dealing with motivation for control and whether high or low perceptions of personal control are associated with positive outcomes and adaptive behavior. For example, Burger and Cooper (1979) found that individuals with a high need for control had the "illusion of control" over chance outcomes in a gambling behavior experiment. And, although having an illusion of control can be beneficial in some circumstances (cf., Lefcourt, 1973), it is also easy to imagine cases in the "real world" in which such misperceptions of control over reality could be harmful; obvious examples are pathological gamblers or high risk-takers who have a poor objective sense of their own vulnerability in situations which are dangerous or have potentially serious negative consequences.

Burger and Cooper (1979) also found that individuals with a high desire for control tended to be more susceptible to learned helplessness than persons who have lower motivation for control. These findings are consistent with those of Pittman and Pittman (1979) who examined the effects of helplessness training on individuals identified as having either an internal or external locus of control. In their experiment, conditions of low helplessness training produced results typical of most control research with internals performing better on an anagram task and externals performing worse. However, after high helplessness training, internals showed greater performance decrements and reported higher depression than externals did. Overall, these results suggest that having a high internal control orientation might be detrimental in

frustrating conditions where one's sense of control or mastery is threatened. In such conditions, lower expectations for personal control might be more adaptive.

Other research has also pointed to factors which might influence the desire for control and whether high perceived personal control will result in positive outcomes. For example, Rodin, Rennert, and Solomon (1980) questioned some of the basic assumptions about control which treat it as a "panacea for life problems." These authors suggested that one's desire to have control might depend on having enough information to evaluate alternative courses of action so as to increase the probability of getting the best possible outcome. People's willingness to take responsibility for decision-making and exertion of control may depend on having sufficient information and expertise to handle a given situation (see also French, et al., 1960). Such findings suggest that control over decision-making is desirable only when individuals feel that having such control provides an opportunity to bring about good outcomes and minimize negative outcomes.

All these studies seem to suggest that at least for some individuals under some circumstances perceptions and/or desires for low personal control (or high external control) might actually be more functional--or at least not detrimental. Not all people have the power, expertise, or inclination to take personal control in all circumstances. Lowering one's expectations for how much control one can exert in certain situations might be more adaptive than persisting in unrealistic expectations that produce repeated failures (cf., Janoff-Bulman & Brickman, 1980). Similarly, in situations where people truly have little objective control or personal knowledge, it might be better to

defer to the external control of a trusted powerful other or "expert" who is willing to take responsibility and is likely to make good decisions.

Person-Environment Fit

The studies just reviewed were selected because they all point to the potential importance of considering two aspects of control: simultaneously: the amount of control one has and the amount of control one desires. Most research on control has focused only on the first; that is, how much control people think they have (or expect to have). However, it seems reasonable that having more control than one wants in a given situation might produce just as many negative effects as having too little control. For example, being in a situation in which one has more responsibility or control over others than one feels comfortable with can produce stress and subsequent strain (Cobb, 1973; French & Caplan, 1973). Indeed, most people can probably think of settings in which they would be quite happy and actually relieved to have someone else be in charge and make decisions.

There have been a few studies suggesting more positive outcomes when an individual's control orientation was matched to the demands of the situation (Brownell, 1982; Bazerman, 1982; Karabenick & Snull, 1978; Quaglieri, 1980; Rothbaum, Weisz, & Snyder, 1982). For example, Brownell (1982) examined the impact of locus of control on performance while manipulating subjects' perceived situational control (which was manipulated by altering the subjects' involvement in and influence over decision-making in the experimental task). He found that internally-oriented subjects both performed better and enjoyed the task more under conditions of high situational (i.e., objective) control, whereas

externally-oriented subjects performed better and enjoyed the task more under conditions of low situational control. A conceptually related study by Bazerman (1982) examined the impact on performance when there was either congruence or misfit between the amount of control available to a person and the person's perceived ability to make use of that control. He also found poorer performance in situations that provided either too much or too little control relative to a person's perceived ability to exercise control.

Such studies further support the potential importance of considering both how much control people perceive they have as well as how much control they want to have. The notion that there is some

optimal blend of these two aspects of control can be formulated nicely using Person-Environment (P-E) Fit theory (French, Rodgers, and Cobb, 1974; French & Kahn, 1962). Using this theory, one would hypothesize that it is not necessarily the absolute amount of internal or external control a person has that affects psychological adjustment, but rather the relationship between what the person has compared to what he or she desires. Under this formulation one would hypothesize that "misfit" between the control one has versus desires would cause psychological stress and thereby produce poor affect and impaired cognitive and behavioral functioning.

Examining perceptions of control in terms of a P-E Fit model could provide a more powerful framework for relating beliefs about control to adaptive functioning. This model provides a theoretical rationale for integrating multiple aspects of the control construct (e.g., objective vs. subjective control; perceived vs. desired control). For example, P-E Fit theory proposes that when a person's needs (e.g., desires for

control) are greater than the environmental supplies available for satisfying those needs (e.g., opportunities for behavioral control over rewards), a stressful state exists which produces "strain" (e.g., feelings of deprivation, frustration, dissatisfaction, aggression, negative affect, and maladaptive behavior). Similarly, if the environmental demands for personal control (e.g., responsibilities for others and decision-making) are higher than a person's abilities or desires, this also should produce stress related to the threat of failure or actual negative outcomes resulting from lack of ability. This condition should also produce negative consequences such as poor affect and impaired performance. Using the P-E Fit model, control could be examined in the context of a broad theoretical formulation which integrates a set of concepts and mechanisms considered important for maintaining or improving psychological adjustment and functioning (Caplan, 1983; Caplan, Cobb, French, Harrison, & Pinneau, 1980; French, Caplan, & Harrison, 1983; French, et al., 1974; Harrison, 1978).

Summary of Research Issues and Hypotheses

This paper questions two general assumptions frequently made in research on control. The appropriateness of these assumptions are addressed in terms of the two general research questions summarized below.

a. Are perceptions and needs for control the same across a sampling of life domains? It has been proposed here that the control one has and wants might vary across different life domains. For example, one specific hypothesis is that individuals might perceive more internal control over their personal lives than their work lives because work (unlike one's personal life) is a domain in which authoritative others

(e.g., bosses) usually have "legitimate" power. It might also be hypothesized that individuals will want less personal control over domains where they feel less competent to deal with problems. For example, people who have recently experienced a threat to their health might prefer control over that domain to be in the hands of an expert or "powerful other" (such as a doctor) rather than in their own hands or left up to chance.

b. Are perceptions of higher personal control always associated with greater well-being? It has been proposed here that this might depend on the life domain. For example, people's general well-being may be more affected by the perceived internal control they have over "self-oriented" concerns (e.g., emotions and personal behavior) than by the control others have over more "other-oriented" domains (e.g., work life). It has also been proposed here that congruence between the amount of control a person has and wants should be considered. It is hypothesized that the congruence or "fit" between the amount of control one has and desires will be an important predictor of good adjustment and well-being above and beyond the absolute amount of control one has. For example, a person who perceives low personal control at work but also desires low personal control at work would be predicted to show better affective adjustment than an individual who has relatively high personal control but desires a lot more. This prediction would not be made by researchers who assume that the absolute amount of personal control one perceives is the critical factor.

Method

Subjects

The sample consisted of approximately 340 adults (61% women and 39% men) who were visiting one of three major out-patient clinics in the Detroit metropolitan area. These individuals were recruited as respondents because they were part of a readily available subject pool representing a wide spectrum of individuals for whom concerns in several life domains were likely to be salient. For example, compared to a sample of young college students, an older adult sample of clinic out-patients was expected to have salient health concerns (which were serious enough to warrant consulting a physician but not severe enough to prohibit out-patient status) and to have a broad range of concerns in a number of life domains such as family and personal life and work life. Virtually all individuals asked to fill out a questionnaire agree to do so. However, a small number of people were called to see the doctor before completing the questionnaire, so they were not included in the analyses.

Procedures

Trained interviewers from the Field Section of the Institute for Social Research went to each of the three out-patient clinics to recruit respondents as soon as they began waiting to see a physician. This was considered a convenient time for patients to participate in the study because most people had to wait before a doctor was available. The interviewer gave the subject one version of the questionnaire which had been randomly selected from among the six possible versions (see

discussion of design below). The questionnaire was self-administered, but interviewers were available to answer any questions the respondents had.

Design

The overall study design was a 3-factor mixed design with one between-subjects factor³ ("life domain") and two within-subjects factors ("dimension" of control and "perceptions and needs" for control). Control was measured with reference to one of six life domains: Work Life, Health, Personal Life, Emotions, Actions & Behavior, or Life as a Whole.⁴ Perceptions of control were measured in three dimensions frequently examined in control research: internal (or personal) control, control by others, and control by chance factors. In order to apply the P-E Fit model, perceptions and needs for control were measured by asking questions in two commensurate forms: one referred to the amount of control the person had and the other referred to the amount of control the person would like to have. Asking these questions,

³ Ideally, it would have been preferable to make "life domain" also a within-subjects factor in which all control questions were asked for each life domain rather than having subjects answer only with reference to one specific domain. However, this was not feasible for two reasons. First, a questionnaire containing a sufficient number of items for reliable measurement of two types of control in three dimensions repeated for six different life domains would have been prohibitively long and repetitious. Second, differences in the meanings of similarly worded questions in such a long questionnaire would undoubtedly have been blurred, which would have compromised any true internal and divergent validity of the subscales.

⁴ We originally planned to include a "self" domain. However, because we wanted to phrase questions both in terms of feelings and of behaviors, two separate "domains" were included--Emotions and Actions & Behavior--in an attempt to address these two general aspects of the self. Also, Life As A Whole was included as a global "domain" which hopefully would represent a kind of summing up or averaging of more specific domains (see footnote 1).

with parallel wordings made it possible to compute discrepancy scores indicating P-E "misfit" on control (cf., French, et al, 1974; Harrison, 1978).

Measures

Measures of control perceptions and needs. As indicated above, questions were designed to measure perceived and desired control for three dimensions of control (internal, others, and chance). Two items, which were developed a priori to measure each of these six constructs, were averaged to form the primary indices. The basic stems of the control items were very similar in all versions of the questionnaire. Only the frame of reference varied according to which life domain a subject had been randomly instructed to consider while responding. For example, a person assigned to the Work Life domain would be asked: "During the last 7 days, how much did others determine what you did at work?" Whereas, someone assigned to the Personal Life domain would be asked: "During the last 7 days, how much did others determine what happened in your personal life?" Similarly worded items asked about how much the respondent wanted others to determine what happened in a given domain. Responses to all items were made using a 5-point Likert-type scale with values ranging from "not much" [1] to "a great deal" [5] of control.

Measures of "misfit" on control. For each of the three dimensions of control (internal, others, and chance) "misfit" measures were constructed to indicate the relative incongruence between the amount of control respondents had versus the amount they wanted to have. As described above, P-E Fit theory has proposed that perfect congruence between what a person has and wants should be related to less "strain"

(i.e., better well-being). However, discrepancy or "misfit" between what a person has relative to what that person wants should be associated with higher strain and poorer well-being (cf., French, et al., 1974; Caplan, et al., 1980; Harrison, 1978). Strain could result from such incongruence regardless of whether the misfit was in the direction of "excess" (i.e., person has more control than wants) or "deficiency" (i.e., person has less control than wants).

The hypothesis that decreased well-being could result from having either too much or too little of something relative to what one wanted is equivalent to proposing an interaction effect with strain which has explanatory power above and beyond the additive effects of the "have" and "want" components. Possible models for such an interaction have been discussed extensively elsewhere (cf., Caplan, et al., 1980; French, et al., 1974; Harrison, 1978; Kahana, 1975). The most common technique modeling such a P-E fit interaction is to compute the absolute discrepancy between what one has relative to what one wants.⁵ This term is then added to the regression equation, after the "have" and "want" components have been entered, to see if it explains any additional variance. Hence, in the present study, misfit scores were created by summing the absolute values of the differences between commensurate pairs of "have" and "want" control items. For example, if a person gave responses of "3" and "4" to the first pair of items

⁵ Although discrepancy scores present a number of problems (e.g., reduced reliability), they have an interesting advantage over the raw scores from which they were computed: constant factors that influence respondents' answers (generating either stable "true score" or correlated measurement error) are cancelled out when the raw scores are subtracted. Thus, discrepancy scores are free of such constant factors leaving only "true differences" and random noise in the difference measures.

measuring "have" and "want" but gave responses of "5" and "2" to the second pair of commensurate items, this person's control misfit score would be "4" (i.e., $|3-4| + |5-2| = 4$). Absolute misfit scores created this way were then used in linear regression procedures to model interaction effects on well-being measures.

Measures of well-being. Indicators of general well-being included standardized scales for anxiety, depression, and quality of life. Anxiety and depression were assessed with items from the Hopkins Symptom Checklist (Derogatis, Lipman, Rickels, Uhlenhuth & Covi, 1974). Responses were made using a 4-point Likert-type scale indicating how much during the last seven days the respondent was bothered by an aspect of anxiety or depression. Perceived quality of life was assessed with standard items developed by Andrews & Withey (1976). These items asked about how the respondent felt about friends and acquaintances, home life, health, self, job, the way problems were handled, and life as a whole. Responses were made using a 7-point "terrible to delighted" scale (cf., Andrews & Withey, 1976), and were averaged to form the life quality scale.

Results

Differences in Control Across Life Domains

The first research question was whether control perceptions and needs were the same across different life domains. To address this question, a one-way multivariate analysis of variance was run to determine whether the perceived and desired control measures considered simultaneously (i.e., controlling for correlations among the control measures) varied across the six life domains. This was followed by

univariate analyses of variance along with all pairwise Scheffe comparisons to examine specific group mean differences for each control index. These results are presented in Table 1.

 Insert Table 1 about here.

The MANOVA test for the equality of group means produced an $F=2.07$ ($p<.001$), suggesting overall significant mean differences among the domains. Considering the measures of control perceptions and needs, simultaneously, there were significant ($p<.05$) mean differences between (a) the Health domain and all other domains and (b) the Work domain and both Actions & Behavior and Life as a Whole.

Univariate ANOVAs indicated significant ($p<.05$) F -statistics for 3 of 6 control indices: internal control one had, internal control one wanted to have, and control one wanted others to have. The pairwise Scheffe comparisons for these three control indices indicated that most of the significant differences occurred between the domains of Work Life, Health, and Actions & Behavior. The average amount of internal control one had was significantly lower over Work Life and Health than over both Actions & Behavior and Life as a Whole. Also, the internal control one wanted over both Work Life and Health was significantly lower than over both Actions & Behavior and Emotions. In fact, desired internal control over Health was significantly lower than all other domains except for Work Life. The last major difference was that respondents wanted others to have significantly more control over the Health domain than over any other domain. The domains of Personal Life, Emotions, and Life as a Whole were not significantly different from each

other for any of these control indices. Neither perceived nor desired control by chance factors varied significantly ($p > .05$) across any of the life domains.

Consistent with common assumptions about control, most respondents wanted more internal control and less external control than they had. In each of the life domains, respondents on the average desired higher levels of internal control than they perceived they had; on the other hand, respondents desired lower levels of control by others and by chance than they perceived they had.

This also tended to be true at the individual level. Considering all domains together, scores computed for each individual by summing the discrepancy between commensurate "have" and "want" items indicated that 55% of respondents had less internal control than they wanted, while 28% had exactly what they wanted; 17% of respondents had more internal control than they wanted. Similar computations indicated that 66% of respondents felt that they were controlled by others more than they wanted, while 23% of respondents felt that others had just the right amount of control; only 11% of respondents wanted others to have more control than they had. Similarly, 57% thought chance factors controlled things more than they wanted, while 33% had exactly what they wanted; only 10% of respondents wanted more chance control than they had.

Although the percentages given above reflect the "average" domain, it should be noted that there was some variation among domains in the percentages of people who had more or less of a given type of control than they wanted. Table 2 indicates for each life domain the percentage of people who had "perfect fit" with regard to a given dimension of control (i.e., the amount they had was exactly what they wanted). Table

2 also indicates the percentage of people having "deficiency misfit" on a given control dimension (i.e., the amount of control they had was less than the amount they wanted), and the percentage of respondents having "excess misfit" (i.e., the amount of control they had was more than the amount they wanted).

 Insert Table 2 about here.

It is interesting to note that very few respondents reported having excess misfit on internal control (i.e., having more than they wanted) in the domains of Emotions (9%) and Actions & Behavior (8%). However, in the health domain, 31% of respondents reported excess misfit on internal control. These trends were reversed for the external dimensions of control. For example, very few people reported deficiency misfit for control by others in the domains of Emotions (5%), Actions & Behavior (7%), and Personal Life (7%); however, 26% reported deficiency misfit on control by others in the Health domain (i.e., they wanted others to have more control over health). Chance control produced results similar to control by others except that the percentage having deficiency misfit in the Health domain was smaller (14%).

Differential Impact of Control Across Domains

The second research question was whether higher perceived internal control (and lower external control) would be associated with greater well-being across all the life domains examined. This question was

These measures of fit were computed by summing the differences for commensurate "have" and "want" items for a given control construct. They were computed the same way as the "absolute misfit" scores (see Methods) except that the absolute value of the discrepancies between items was not taken. In this way, the distributions of positive values indicating "excess misfit" and negative values indicating "deficiency misfit" could be observed separately for descriptive purposes.

addressed using correlational and multiple regression procedures.

Analyses relating the control indices to the affect and quality of life scales were computed within groups so that the magnitudes and patterns of association for the different life domains could be compared. These comparisons indicated whether the three dimensions of perceived control had more impact on well-being in certain life domains than in others.

Perceptions, needs, and misfit on control: Bivariate analyses.

First, to make sure that the various control measures were tapping different aspects of the construct, the intercorrelations among these measures were examined. Consistent with previous research, the internal, others, and chance control measures generally appeared to be measuring different dimensions. Averaging across all domains, perceived internal control was correlated $r = -.14$ with perceived control by others (ranging from $+.20$ to $-.30$ in specific domains), and $r = -.04$ with perceived chance control (ranging from $+.06$ to $-.15$ in specific domains); perceived control by others and chance control were correlated $r = .23$ (ranging from $-.01$ to $+.48$ in specific domains). Also averaging across all domains, desired internal control was correlated $r = -.29$ with desired control by others (ranging from $+.06$ to $-.48$ in specific domains), and $r = -.22$ with desired chance control (ranging from $+.03$ to $-.50$ in specific domains); desired control by others and chance control were correlated $r = .35$ (ranging from $.20$ to $.55$ in specific domains). Overall, desired control in the three dimensions was somewhat more

highly intercorrelated than perceived control; however, none of the relationships were high enough to suggest they were measuring the same dimension.

The bivariate relationships between the "have" and "want" measures were also examined to make sure they were not measuring the same thing. For example, if people had already successfully coped with "misfit" on control by adjusting their aspirations ("want") to match their perceptions of what they "have" (cf., French, et al., 1974), then the correlations between the perceived and desired control measures might be too high to detect discriminant validity. Although the "have" and "want" measures were correlated, the relationships were not high enough to indicate that they were measuring identical perceptions and desires. Averaging across all domains, perceived and desired internal control were correlated $r = .36$ (ranging from .15 to .51 in specific domains); perceived and desired control by others were correlated $r = .34$ (ranging from -.02 to .52 in specific domains); and perceived and desired chance control were correlated $r = .38$ (ranging from .04 to .69 in specific domains). In the domains in which these correlations were fairly high, there might be some spurious similarity in the patterns of findings for the bivariate relationships between perceived and desired control with the well-being measures. However, this was not a problem in the regression procedures reported in the next section because they controlled for any overlap (i.e., correlation) between the "have" and "want" measures.

Also important for overall interpretation of this study's findings were the intercorrelations among the dependent variables measuring well-being. The life quality measure was correlated $r = -.49$ with anxiety and $r = -.56$ with depression; anxiety and depression were correlated $r = .70$. Thus, to some extent there should be a tendency for the pattern of findings to be somewhat similar for each of these

well-being measures simply because they are fairly highly correlated. However, these three measures did not seem to be measuring identical aspects of well-being, so they were each analyzed separately. The reader should keep in mind, though, that the findings relating control to each of these well-being measures do not represent independent assessments of the relationships.

Table 3 presents the correlations between the three well-being measures (anxiety, depression, and life quality) and the three types of control measures: (a) perceptions (i.e., the control one had), (b) needs/motives (i.e., control one wanted), and (c) absolute misfit between what one had and wanted. Correlations are presented for each of the three dimensions of control (internal, others, and chance). For example, the first number in the table, -.10, is the correlation between anxiety and the amount of internal control one had over the Work Life domain. These zero-order correlations are presented to indicate the direction and magnitude of the simple bivariate relationships between a given control index and well-being measure (i.e., not controlling for the effects of any other variables).

 Insert Table 3 about here.

Overall, the directions of the correlations were highly consistent with what would be predicted from previous research on control. Higher internal control was generally associated with greater well-being, whereas external control by others and chance tended to be related to lower well-being. However, there were quite a few differences in the sizes of correlations between any within-domain set of control and well-being measures. For example, sometimes the highest correlation involved

perceptions of the control one had, other times the highest correlation involved the control one wanted, and other times the highest correlation involved the misfit measure.

A simple count⁷ of the significant correlations involving each of these types of control measures showed that the misfit indices produced the most significant correlations (25), followed by the amount of control one had (20) and the amount of control one wanted (17). There also seemed to be a difference in the number of significant correlations produced in different life domains. Again, a simple count of the number of significant correlations in each of the domains showed that the highest numbers were produced in the domains of Actions & Behavior, (16), Life as a Whole (15), and Emotions (11). Fewer significant correlations were found in the domains of Personal Life (8), Work Life (6), and Health (6). The control measures also predicted depression and life quality somewhat better than anxiety. There were 24 significant correlations involving depression, 22 with life quality, and 16 with anxiety.

Perceptions, needs, and misfit on control: Regression analyses.

A primary goal of this study was to examine whether a person's needs for control and/or "misfit" between perceptions and needs would explain variation in well-being above and beyond perceived control. Hierarchical multiple regression procedures were used to explore this issue.

⁷ It should be noted that the counts provided in this paragraph were made primarily for descriptive purposes to summarize the bivariate findings. However, results of these counts parallel the results of the regression analyses, which are the more appropriate analyses for examining the pattern of significant findings.

Because measures of the perceived (or expected) control one has typically have been used in previous research, the "have" measures of control were forced to enter first into the regression equations predicting well-being. Thus, results produced at the first step of the regressions can be interpreted as conceptually similar to ones produced in much previous research.

At the second step of the regressions, the "want" measures were entered into the equations to determine whether they accounted for a significant increase in the variance beyond what was already accounted for by the "have" measures. ~~Instances in which significant amounts of~~ variance were added would indicate that needs/motives for control were important apart from perceptions of the control one has.

At the third step of the regressions, the measures of "misfit" between perceptions and needs for control were added into the equations to determine whether they accounted for a significant increase in variance beyond what was already accounted for by the "have" and "want" components of control. Cases in which misfit measures added significant amounts of variance would indicate that interactions resulting from the discrepancy between perceptions and needs for control were important for predicting well-being above and beyond knowing only what one perceived and desired.

Table 4 summarizes the results of the hierarchical regression analyses. At the first step of the regressions, the "have" measures (perceptions) of control accounted for significant amounts of variance in the well-being measures in 37% of the cases (i.e., 20 of 54 regressions). The "want" measures (needs/motives) of control entered at the second step of the regressions accounted for significant additional

variance in 22% of the cases (i.e., 12 of 54 regressions). At the third step of the regressions, the "misfit" measures indicating absolute discrepancy between perceptions and needs for control added significant amounts of variance beyond the "have" and "want" measures in 28% of the cases (i.e., 15 of 54 regressions). In fact, the needs and/or misfit measures of control accounted for significant additional variance in well-being beyond that accounted for by perceived control in almost 45% of the regressions (24 of 54).

 Insert Table 4 about here.

The distribution of significant effects varied across the six life domains. Considering the "have," "want," and "misfit" measures together, the most significant effects were found in the domain of Actions & Behavior (15 instances of significant effects). The next highest number of significant effects occurred in the domain of Emotions (9), followed by Work Life and Life as a Whole (7 each), Personal Life (5), and Health (4). Considering only the "want" and "misfit" measures of control, the domains producing the most significant effects were Actions & Behavior (10), Work Life (6), and Emotions (4).

The distribution of significant results also tended to be differentially distributed among the three dimensions of control (i.e., internal, others, and chance). Considering the "have," "want," and "misfit" measures together, the measures of chance control produced the most significant effects (19 instances) followed by the measures of internal control (16 instances) and control by others (12 instances). The "have" measure of chance control produced the most significant effects (9 instances) whereas the "want" measure for control by others

produced the fewest significant effects (1 instance). The remaining measures produced either 5 or 6 significant effects each. The number of significant effects produced by the misfit measures was equally distributed across the internal, others, and chance dimensions (5 instances in each). It might also be noted that depression was significantly predicted by the control measures in these regression analyses somewhat more often (18 instances)* than either life quality (15 instances) or anxiety (14 instances).

Discussion

Differences in Control Across Life Domains

With regard to the control generalization issue, it was hypothesized that people would perceive that they have and report that they want more personal control in domains related to self than in more interpersonal or other-oriented domains such as work life. It was also hypothesized that individuals would want less personal control over domains in which they felt less competent to deal with domain-related problems, such as health. Results from this study provided mixed support for these hypotheses.

As predicted, there were significant differences in perceptions and needs for control across the sampling of six domains examined in this study. Most involved differences between the domains of Actions & Behavior, Work Life, and Health. As hypothesized, people had the most internal control over the self-oriented domain of Actions & Behavior and the least internal control over the more interpersonal and other-

* The fact that depression was related to control more often than the other two well-being measures is consistent with previous literature on learned helplessness, which has been proposed as a model for depression (Seligman, 1975).

oriented domain of Work Life. However, the domains of Emotions and Health might also be considered "self-oriented," and perceived internal control means for these domains were not among the highest. In fact, average internal control in the Health domain was the lowest, along with Work Life, of all the domains.

Finding that internal control over Health was lower than other domains, however, was consistent with the second hypothesis. It was hypothesized that people might be expected to perceive less personal control in domains where they did not feel competent to solve specific domain-related problems. In such cases, they might want others who are more knowledgeable or competent in solving such problems to have control. The finding that participants in this study perceived and wanted low personal control yet wanted others to have high levels of control over the Health domain relative to other domains was consistent with this hypothesis. It was very likely that these clinic out-patients, whose health had recently been threatened, would want control over health problems to be in the hands of a competent "other" (e.g., a physician).

While both perceived and desired internal control and desired control by others showed variation across life domains, no significant mean differences across domains were found for perceived control by others or for perceived and desired control by chance factors. Perceptions and needs for "external" types of control might generally tend to be lower and more uniform across a variety of life domains than perceptions and needs for internal (or personal) control. This might be especially true for perceptions and desires for chance control because such control generally implies randomness and unpredictability, which

can be threatening and stressful in most life domains. This might be less consistently true for perceptions and needs for control by others if the hypothesis about perceived competence in handling domain-specific problems is true.

Results indicating some differences in perceptions and needs for control across life domains suggest that more global measures of control might sometimes be misleading or inappropriate. For example, a person whose health has recently been threatened might perceive and desire low personal control over the health problem and want external control by an expert other. Yet that same person might simultaneously perceive and desire very high internal control over his or her own actions and behavior. Such differences might not be reflected in a global measure of "locus" of control and, therefore, their impact on various outcomes might not be observed.

Differential Impact of Control Across Life Domains

Finding that there can be differences in perceptions of and desires for control in various life domains leads to the second major issue addressed in this research. That is, if perceptions and needs for control vary across life domains, so might the impact on well-being. A related issue is whether the relationship between well-being and control is a function only of perceptions about the amount of control one has or expects in a given domain or whether one's needs for control also relate to well-being.

Perceptions of control. Overall, the findings relating well-being to perceived control were consistent with previous research. Although the magnitude of the correlations varied greatly among life domains and dimensions of control (i.e., internal, others, chance), higher levels of

internal control tended to be associated with greater well-being whereas higher levels of external control by others and chance tended to be related to poorer well-being. The magnitude of the correlations between perceived control and the well-being measures were statistically significant most often in the domains of Actions & Behavior, Emotions, and Life as a Whole and least often in the domains of Work Life, Personal Life, and Health.

Measures of the amount of chance control one perceived produced a greater number of significant correlations with the well-being measures than did perceptions of internal control or control by others. Also, perceptions of chance control predicted the three well-being measures equally well; whereas perceptions of internal control were more often related to life quality and perceptions of control by others were more often related to depression than to the other well-being measures.

Needs for control and "misfit." Results presented here indicated that needs for control and misfit between needs and perceptions provided additional explanatory power beyond control perceptions for predicting the measures of well-being used in this study. In almost 45% of the analyses examining this issue, either control needs or misfit (or both) accounted for significant additional variance in well-being after perceived control was taken into account.

As with control perceptions, the needs and misfit measures of ~~control in the various life domains~~ also tended to have a differential impact on well-being. Needs for control and misfit on control most often explained significant amounts of variance, after accounting for perceived control, in the domains of Actions & Behavior, Work Life, and

Emotions. Considering misfit on control specifically, it was most likely to have an impact on well-being independent of perceptions and needs in the domains of Actions & Behavior and Work Life.

It is interesting to note that the measures of control perceptions, needs, and misfit produced the greatest number of independent significant effects in the life domains for which people felt they had and/or wanted either the most or least internal control. For example, the highest levels of perceived internal control were reported for the domains of Actions & Behavior and Life as a Whole while the lowest levels were reported for Work Life and Health. The highest levels of desired internal control were reported in the domains of Actions & Behavior and Emotions, while the lowest were in Work Life and Health. The greatest number of independent significant effects produced by the control measures occurred for the domains of Actions & Behavior and Emotions, followed by Work Life and Life as a Whole. Thus, control perceptions, needs, and misfit were all important predictors of well-being in the domains for which perceived and/or desired internal control was significantly high or low--with the exception of the Health domain. Even though the Health domain did not produce as many significant effects as the other domains just noted, 3 of 4 significant effects which did occur involved the control needs or misfit measures. This further points to the importance of considering needs for control in addition to perceived control.

Also of note was the finding that control perceptions, needs, and misfit measures in all three dimensions of control (i.e., internal, others, and chance) produced significant independent effects on well-being. In fact, measures of chance control produced the greatest

number of significant effects followed by measures of internal control and control by others (in that order). Thus, although extreme levels of perceived or desired internal control differentiated the domains for which control had a greater impact on well-being, measures in all three dimensions of control within these domains were related to well-being.

Summary and Conclusions

Findings indicated that individuals did perceive and desire differing amounts of control across domains. People perceived the most internal control over the self-oriented domain of Actions & Behavior and the lowest internal control over the more interpersonal and other-related domain of Work Life. Desired internal control also was higher for the more self-oriented domains of Actions & Behavior and Emotions but lower for the other-oriented domain of Work Life.

Unlike what might be predicted from previous research, people also perceived and desired very low levels of internal control over the Health domain. At the same time, they desired a higher level of control by others over the Health domain than any other domain examined. Considering that participants in this study were clinic out-patients who presumably had experienced a recent threat to their health, these results were consistent with the hypothesis that individuals who feel less competent to deal with a specific problem will prefer control in the problem-related domain to be in the hands of an "expert" other (e.g., a physician when the problem is in the domain of health).

No domain differences were found for perceptions of or desires for control by chance factors. For both types of "external" control by others and chance, perceptions and needs generally tended to be lower and more uniform across life domains than for internal control. Such

findings might be expected particularly for chance control because it generally implies unpredictability, which is frequently considered undesirable and stressful in any domain. The low and generally undesirable levels of control by others might also be more consistently found across a variety of domains except when people feel incompetent to handle domain-related problems and prefer to relinquish control to expert others.

In summary, well-being (as indicated in this study by measures of anxiety, depression, and life quality) was most likely to be related to control perceptions, needs, and misfit in the self-oriented domains of Actions & Behavior and Emotions, the more global Life as a Whole domain, and the interpersonal other-oriented domain of Work Life. On the whole, control in the self-oriented domains appeared to be most important among the domains examined for predicting the well-being measures included in this study. Because control in the more global Life as a Whole domain was also important, it is interesting to speculate about what people were actually considering when they made their judgements about control. For example, it would be especially interesting if people primarily considered the amount of self-oriented control they had and wanted over various aspects of their lives when they made their global life-as-a-whole evaluations.

Future research to replicate and expand these findings could be useful for gaining a better understanding of the general concept of control. For example, useful information about how control impacts on various outcomes might result from examining more specific aspects of control (e.g., control via decision-making when a person does or does not have sufficient information; control related to self-determination

versus power over others; control likely to produce positive outcomes versus negative outcomes; different bases for control by others; and so forth). Better understanding might also be gained through research exploring more clearly defined domains, such as specific aspects of self-control involving weight reduction or physical fitness, marital interactions, or supervisory versus subordinate work relationships. Such refinements along with considering both the amount of control one has and desires should help provide a better understanding of the mechanisms by which control impacts on psychological adjustment and well-being.

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Table 1

MEANS AND ANOVA¹ RESULTS COMPARING CONTROL MEASURES ACROSS DOMAINS

| Domains | Control Indices | | | | | |
|--------------------|-------------------|--------|--------|--------------------|-------------------|--------|
| | Perceived Control | | | Desired Control | | |
| | Internal | Others | Chance | Internal | Others | Chance |
| Work Life | 3.4 ² | 2.9 | 1.8 | 4.0 ¹ | 1.8 ³ | 1.3 |
| Health | 3.4 ² | 2.6 | 2.1 | 3.9 ⁴ | 2.2 ⁵ | 1.5 |
| Personal Life | 3.8 | 2.5 | 2.0 | 4.2 ⁶ | 1.6 ³ | 1.3 |
| Emotions | 3.7 | 2.8 | 2.1 | 4.4 ^{7,8} | 1.7 ³ | 1.6 |
| Actions & Behavior | 4.1 ² | 2.6 | 2.2 | 4.6 ^{9,8} | 1.8 ³ | 1.3 |
| Life as a Whole | 3.9 ² | 2.5 | 1.9 | 4.3 ⁴ | 1.7 ³ | 1.4 |
| Univariate F | 2.53 [*] | .92 | 1.62 | 5.33 ^{**} | 2.98 [*] | 1.05 |
| eta | .18 | .11 | .15 | .25 | .19 | .12 |

* p < .05

**p < .01

¹MANOVA F=2.07 (p < .001)²Mahalanobis distances indicated: (a) Health was significantly different from all other domains, and (b) Work Life was significantly different from both Actions & Behavior and Life as a Whole.³Perceived internal control was significantly lower (p < .05) over Work Life and Health than over both Actions & Behavior and Life as a Whole.⁴Desired internal control over Work Life was significantly (p < .05) lower than over both Emotions and Actions & Behavior.⁵Desired internal control over Health was significantly (p < .05) lower than over the Personal Life, Actions & Behavior, Emotions, and Life as a Whole.⁶Desired control by others over one's Health was significantly (p < .05) higher than over all other domains.

Table 2

PERCENTAGES OF CONTROL MISFIT DISTRIBUTIONS

| Domains | Internal Control | | | Control By Others | | | Chance Control | | |
|---------------|----------------------|----------------|------------------|----------------------|----------------|------------------|----------------------|----------------|------------------|
| | (H < W) | (H = W) | (H > W) | (H < W) | (H = W) | (H > W) | (H < W) | (H = W) | (H > W) |
| | Deficiency Misfit(%) | Perfect Fit(%) | Excess Misfit(%) | Deficiency Misfit(%) | Perfect Fit(%) | Excess Misfit(%) | Deficiency Misfit(%) | Perfect Fit(%) | Excess Misfit(%) |
| Act. & Beh. | 57 | 35 | 8 | 7 | 22 | 71 | 7 | 30 | 63 |
| Work Life | 50 | 30 | 20 | 10 | 26 | 64 | 11 | 37 | 52 |
| Personal Life | 54 | 27 | 19 | 7 | 17 | 76 | 8 | 36 | 56 |
| Health | 62 | 7 | 31 | 26 | 21 | 53 | 14 | 24 | 62 |
| Life as Whole | 47 | 38 | 15 | 12 | 25 | 63 | 10 | 30 | 60 |
| Emotions | 61 | 30 | 9 | 5 | 27 | 68 | 7 | 38 | 55 |
| | | | | | | | | | |
| All Domains | 55 | 28 | 17 | 11 | 23 | 66 | 10 | 33 | 57 |

'Misfit computed as $|H - W|$, where H and W are commensurate "have" and "want" items.

Table 3

PEARSON CORRELATIONS¹ BETWEEN CONTROL AND WELL-BEING MEASURES WITHIN EACH LIFE DOMAIN

| Control Dimension & Life Domain | Anxiety | | | Depression | | | Life Quality | | |
|------------------------------------|---------|-------|--------|------------|-------|--------|--------------|-------|--------|
| | Control | | | Control | | | Control | | |
| | Have | Want | Misfit | Have | Want | Misfit | Have | Want | Misfit |
| (n) INTERNAL | | | | | | | | | |
| (60) Work Life | -.10 | -.06 | .19 | -.03 | -.36* | .01 | .13 | .21 | -.26* |
| (55) Health | -.03 | -.15 | .24+ | -.05 | -.28* | .07 | .16 | .14 | -.28* |
| (60) Personal Life | -.20 | -.01 | .12 | -.15 | .00 | .14 | .35* | .20 | -.27* |
| (59) Emotions | -.29* | .21 | .25+ | -.08 | .10 | .01 | .13 | .06 | .03 |
| (39) Acts. & Behav. | -.20 | -.34* | .26 | -.07 | -.30* | .11 | .27* | .48* | -.20 |
| (60) Life as Whole | -.18 | -.04 | .32* | -.23* | -.28* | .29* | .41* | .27* | -.35* |
| (n) OTHERS | | | | | | | | | |
| (60) Work Life | .09 | .04 | .24+ | .07 | .12 | .20 | -.16 | -.09 | -.25* |
| (55) Health | .11 | .12 | -.10 | .14 | .09 | -.08 | -.16 | .01 | -.04 |
| (60) Personal Life | .17 | -.05 | .29* | .20 | -.05 | .24* | -.21 | -.01 | -.31* |
| (59) Emotions | .23* | .12 | .29* | .36* | .17 | .36* | -.09 | -.11 | .04 |
| (39) Acts. & Behav. | .49* | .44* | .24 | .48* | .54* | .01 | -.14 | -.28* | .10 |
| (60) Life as Whole | .21 | .13 | .08 | .24* | .23* | .24* | -.18 | -.12 | -.22* |
| (n) CHANCE | | | | | | | | | |
| (60) Work Life | .20 | .03 | .08 | .20 | .31* | .15 | -.27* | -.16 | -.20 |
| (55) Health | .36* | .19 | .33* | .21 | .20 | .31* | -.16 | -.15 | -.08 |
| (60) Personal Life | .07 | .11 | .06 | .11 | .20 | .18 | -.32* | -.27* | -.38* |
| (59) Emotions | .23* | .17 | .20 | .46* | .34* | .34* | -.17 | .11 | -.23* |
| (39) Acts. & Behav. | .31* | .58* | .24 | .42* | .61* | .37* | -.26* | -.38* | -.24 |
| (60) Life as Whole | .16 | .08 | .09 | .36* | .19 | .22* | -.37* | -.21 | -.27* |

¹Note: Listwise deletion of missing data within a life domain, so respondents had complete data on all control and well-being measures.

+ p < .10, 2-tailed

* p < .05, 2-tailed

Table 4

MULTIPLE R'S FROM HIERARCHICAL REGRESSION ANALYSES PREDICTING WELL-BEING
FROM CONTROL PERCEPTION, NEEDS, AND MISFIT (FORCED IN THAT ORDER)

| Control Dimension & Life Domain | | Anxiety | | | Depression | | | Life Quality | | |
|------------------------------------|----|---------|---------------|-----------------|------------|---------------|-----------------|--------------|---------------|-----------------|
| | | Control | | | Control | | | Control | | |
| | | "Have" | add "Want" | add "Misfit" | "Have" | add "Want" | add "Misfit" | "Have" | add "Want" | add "Misfit" |
| INTERNAL | n | | | | | | | | | |
| Act. & Behav. | 39 | .20 | .35+ | .42 | .07 | .31+ | .34 | .27+ | .49* | .51 |
| Work | 60 | .10 | .10 | .21 | .03 | .36* | .38 | .13 | .23 | .39* |
| Pers. Life | 60 | .20 | .21 | .21 | .15 | .16 | .17 | .35* | .36 | .37 |
| Health | 55 | .03 | .16 | .34* | .05 | .30* | .32 | .16 | .17 | .30+ |
| Life as Whole | 60 | .18 | .18 | .34* | .23+ | .30 | .38+ | .41* | .42 | .42 |
| Emot. & Feel. | 59 | .29* | .39* | .40 | .08 | .14 | .15 | .13 | .14 | .22 |
| OTHERS | | | | | | | | | | |
| Act. & Behav. | 39 | .49* | .54 | .55 | .48* | .58* | .61 | .14 | .28 | .29 |
| Work | 60 | .09 | .10 | .30* | .07 | .14 | .32* | .16 | .18 | .32* |
| Pers. Life | 60 | .17 | .22 | .30 | .20 | .26 | .27 | .21+ | .24 | .31 |
| Health | 55 | .11 | .14 | .20 | .14 | .15 | .20 | .16 | .18 | .18 |
| Life as Whole | 60 | .21 | .22 | .23 | .24+ | .28 | .32 | .18 | .19 | .24 |
| Emot. & Feel. | 59 | .23+ | .23 | .36* | .36* | .36 | .44* | .09 | .12 | .16 |

Table 4

MULTIPLE R'S FROM HIERARCHICAL REGRESSION ANALYSES PREDICTING WELL-BEING
FROM CONTROL PERCEPTIONS, NEEDS, AND MISFIT (FORCED IN THAT ORDER)
(continued)

| Control Dimension & Life Domain | CHANCE | Anxiety | | | Depression | | | Life Quality | | |
|------------------------------------|--------|---------|---------------|-----------------|------------|---------------|-----------------|--------------|---------------|-----------------|
| | | Control | | | Control | | | Control | | |
| | | "Have" | add "Want" | add "Misfit" | "Have" | add "Want" | add "Misfit" | "Have" | add "Want" | add "Misfit" |
| Act. & Behav. | 39 | .31+ | .60* | .67* | .42* | .65* | .75* | .26 | .41* | .48+ |
| Work | 60 | .20 | .20 | .28 | .20 | .32* | .34 | .27* | .28 | .30 |
| Pers. Life | 60 | .07 | .12 | .12 | .11 | .21 | .31+ | .32* | .37 | .45* |
| Health | 55 | .36* | .40 | .42 | .21 | .28 | .34 | .16 | .22 | .22 |
| Life as Whole | 60 | .16 | .16 | .17 | .36* | .36 | .37 | .37* | .37 | .37 |
| Emot. & Feel. | 59 | .23+ | .23 | .24 | .46* | .46 | .46 | .17 | .36* | .37 |

Table entries are the simple bivariate correlations between the "have" control measure and well-being.

Table entries are the multiple R's predicting well-being which result from adding the "want" control measure into the equation already containing the "have" measure.

Table entries are the multiple R's predicting well-being which result from adding the absolute "misfit" measure into the equation already containing the "have" and "want" control measures.

+ $p < .10$, two-tailed

* $p < .05$, two-tailed

NOTE: Significance indicated refers to the amount of additional variance accounted for at each step of the regression.